

Archeological Investigations McGilvery's Battalion Earthworks Gettysburg National Military Park Gettysburg, Pennsylvania



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MANAGEMENT SUMMARY

Archeological investigations were conducted on a selected portion of the McGilvery's Battalion Earthworks on Hancock Avenue within Gettysburg National Military Park. Excavation revealed that the earthwork does not conform with the archeological signatures of known earthworks and does not date to the time of the Battle of Gettysburg. The existing earthwork may possibly cover and preserve below-ground portions of lunettes for battery emplacements dating to 1863.

ACKNOWLEDGMENTS

Investigations at McGilvery's Battalion Earthworks were conducted by the then Mid-Atlantic Regional Office's Archeology Intern Program with Gettysburg High School in cooperation with Gettysburg National Military Park. The authors gratefully acknowledge the efforts of Gettysburg High School students Elizabteh Abersold , Brian Connolly, Bill Hubbard, Chester Nemic , Jen Newcombe, Jody Newton, Bartlet Shaw, Jenny Sites, David Tipson, and Rachael Trippi, led by their faculty advisor, Ms. Judy Pyle. Reed Engle, Chief of Maintenance and Cultural Resources and Kathy Harrison, Historian of Gettysburg National Military Park gave their enthusiasm and knowledge of the site, contributing greatly to the success of this project. Hyman Schwartzberg, Curator, Richmond National Battlefield Park provided useful background information on Civil War artillery methods and tactics. Superintendent Jose Cisneros provided critical administrative and logistical support.

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INTRODUCTION

In compliance with Section 110 of the National Historic Preservation Act of 1966 (as amended), archeological investigations to assess the National Register significance of earthworks on Hancock Avenue were conducted by the Mid-Atlantic Regional Office's High School Archeology Intern Program between June 16 and 21, 1991 (Figure 1). The intern program, active at the park between 1990 and 1992, exposed local students to the management practices, objectives, professional activities, and decision processes developed by the National Park Service to manage historic resources in their community and nationwide. All archeological activities were either directed or conducted by the authors. Archeological investigations were conducted in accordance with the National Park Service's "Secretary's Standards for Archeology" as well as the Commonwealth of Pennsylvania's "Bureau for Historic Preservation Guidelines for Archeological Investigations." All curatorial activities were conducted in accordance with the NPS's *Museum Handbook*. Artifact identification and ANCS plus cataloging was conducted by the Philadelphia Support Office. Original notes, photographs, drawings, and artifacts are on file at Gettysburg National Military Park.

Results of the investigations would determine if the earthworks dated to the Battle of Gettysburg on June 1–4, 1863, or were later constructed as interpretive devices during creation and development of the park. Correct identification of their date of construction would influence their interpretation to the public and their priority for preservation maintenance (Engle personal communication).

BACKGROUND

At the Battle of Gettysburg on July 2nd and 3rd, 1863 the field north of the George Spangler farmhouse and barn was the position of a massing of artillery of the Army of the Potomac. These guns were from the 1st Volunteer Brigade and others, all under the combined command of Lieutenant Colonel Freeman McGilvery. They were composed of Ames' battery of six light 12-pounders; Dow's Sixth Maine Battery of four light 12-pounders; Clark's New Jersey battery of six 3-inch guns; one section of Cooper's Pennsylvania Artillery, Captain Rank's Pennsylvania section of two 3-inch guns; Sterling's Second Connecticut Light Battery of four James rifled and two howitzers; Hart's Fifteenth New York Independent Battery of four light 12-pounders; Phillips' Fifth Massachusetts battery of six 3-inch rifled guns; Thompson's battery, F and C, consolidated Pennsylvania Artillery of five 3-inch rifled guns for a total of thirty-nine guns (ORs, Series I, Vol 27, part 1, page 883). The closest unit to the area selected for testing was the Second Connecticut Light Battery, commanded by Captain John W. Sterling, whose monument is located only some twenty feet south of the excavations.

Both Sterling and Dow reported the construction and use of earthworks at this location. Lt. Col. McGilvery reported "...In front of these guns I had a slight earthwork thrown up, which proved sufficient to resist all the projectiles which struck it..." (*Ibid.*)

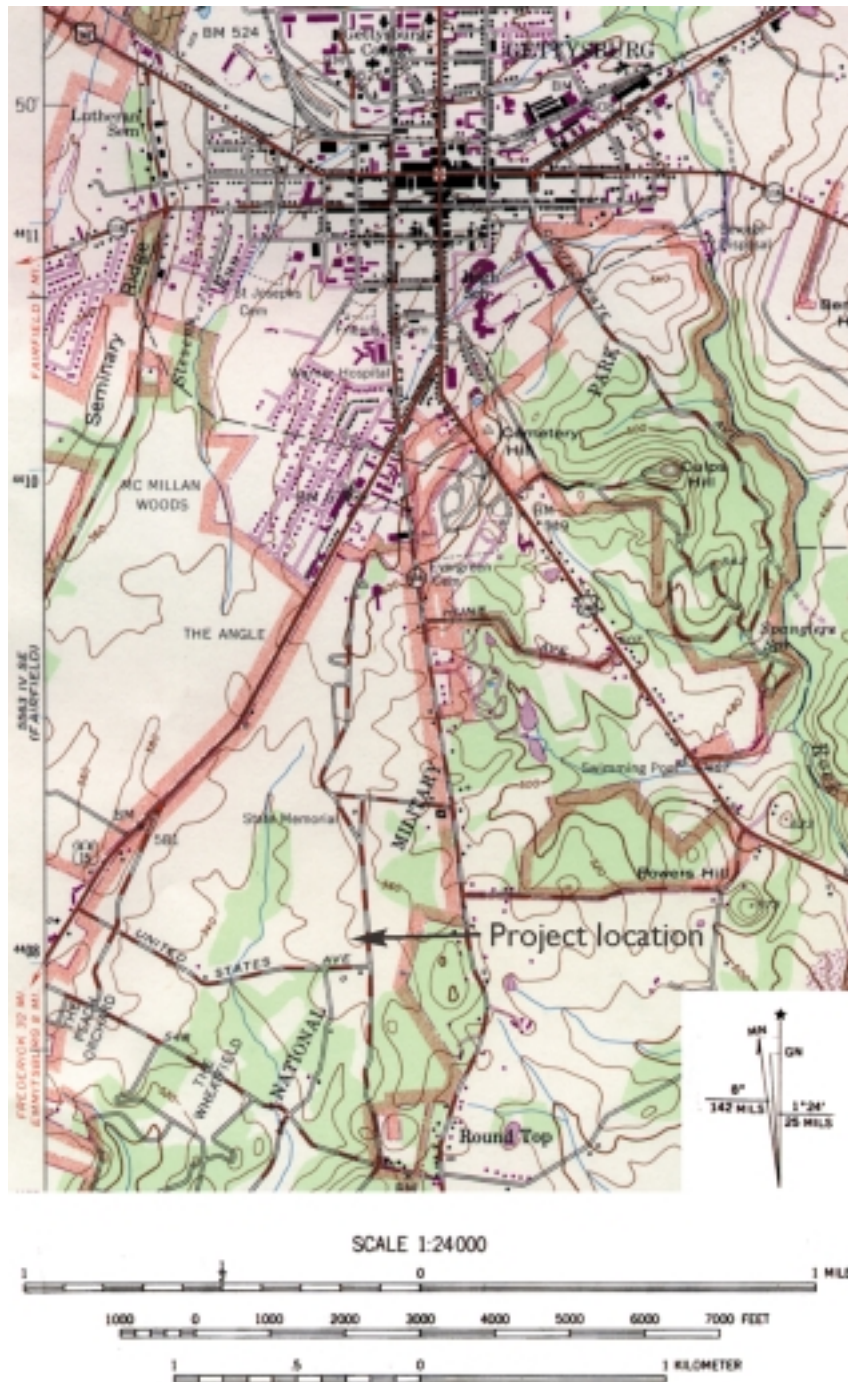


Figure 1: Project location. Detail from U.S.G.S. Fairfield Quadrangle, Pennsylvania-Adams Co. 7.5 Minute Series (Topographic) 1:24,000, 1951. Photorevised 1968 and 1973, Photoinspected 1984 and U.S.G.S. Gettysburg Quadrangle, Pennsylvania-Adams Co. 7.5 Minute Series (Topographic) 1:24,000, 1951. Photorevised 1968 and 1973, Photoinspected 1981.

The report of Lieut. Edwin B. Dow, Sixth Maine Battery stated: "After repairing damages and getting a new supply of ammunition, I reported to Major McGilvery on the morning of the 3d, and was ordered into position between the Second Connecticut Battery and Ames' (First New York) battery, supported by a brigade of the Second Corps. I built earthworks in front of my guns. Nothing of importance occurred until about 11 o'clock, when, at a signal of one gun, the whole rebel line opened a most terrific fire upon our position. Case shot and shell filled the air. The men were ordered to cease firing and take refuge behind their earthworks" (ORs, Series I Vol 27, part 1, p898). The line was depicted in 1868 in the Warren map (Figure 2).

The List of Classified Structures (LCS) describes the McGilvery's Battalion "Lunettes" (LCS06986, Structure Number MD10) as a "...broken and unbroken mound of earth, grass-covered." "These lunettes on West Hancock Avenue are quite dissimilar to the lunettes of Cemetery Hill and Stevens Knoll, not having a distinct formation of their own but being mostly one continuous mound or elevation of earth from the intersection with Humphreys Avenue to United States Avenue (Figure 3). That these existing earthworks may not date from the battle is suggested both by their appearance and accounts of their reconstruction. The Superintendent of Grounds was authorized by the board of directors of the Gettysburg Battlefield Memorial Association to "reconstruct the line of breastworks of McGilvery's Artillery Brigade (Minutes of the Board of Directors, GBMA, GETT Archives: 214). The original works were likely destroyed through farm cultivation some time prior to its acquisition by the Gettysburg Battlefield Memorial Association (Harrison 1976: 1).

Immediately east of the earthworks lies the Patterson Field Stone Wall (LCS06992, Structure Number MD12). During the battle it was used as a defensive position by Cross's Brigade during the Confederate cannonade.

Other Preserved Field Artillery Earthworks

Evaluation of the Hancock Avenue earthworks requires comparison with both surface evident and archeological features. Field earthworks, while ubiquitous during the war, disappeared soon after. Evidence from military manuals, photographs, and archeological investigations as well as other preserved artillery earthworks may provide comparative data for determining their authenticity.

Gettysburg National Military Park

Artillery earthworks preserved at a Gettysburg National Military Park are located at Stevens Knoll, East Cemetery Hill, Spangler's Woods and South Confederate Avenue.

Stevens Knoll (LCS05656; MD05): Six lunettes of Stevens' 5th Maine Battery averaging 27 feet in diameter and 9 feet thick. These were reconstructed in the 1880's by the Gettysburg Battlefield Memorial Association.



Figure 2: Location of McGilvery's Earthworks. Detail from Warren map 1868.



Figure 3: Photograph of McGilvery's Earthworks looking south (1998) with excavation area immediately in foreground of cannon.

East Cemetery Hill (LCS05696: MD06): Twenty-one lunettes of Wiedrich's Battery I, 1st NY Light Artillery, Cooper's Battery B 1st Pennsylvania Light Artillery, Ricketts' Batteries F&G, 1st Pennsylvania Light Artillery, Reynolds' Battery L, 1st NY Light Artillery, and Stewarts' Battery B 4th US Artillery. Lunettes average 27 feet in diameter and 8 feet wide. Stewart's defenses were photographed immediately after the battle and appear as Figures 4 and 5. They were reconstructed in ca. 1882 by the Battlefield Memorial Association.

Poague's Battalion Lunettes (LCS05648; Structure Number MD18): Located between Spangler's Woods and McMillan's Woods this complex consists of two sections. Section 1 consists of six lunettes reconstructed around 1900, while section 2 contains six unreconstructed lunettes prepared by the Confederates for the anticipated counterattack after Pickett's Charge. The latter group average 22 feet long and 6 feet wide (Harrison 1976).

Reilly's Section Lunettes (LCS05649; Structure Number MD21): These two lunettes are stone reconstructions over an earth core. They are 26 feet in diameter and five feet wide.

Examination of the historic photographs reveal that the documented lunettes at Gettysburg were constructed with a foreditch, a mound, and reveted in the rear with fence rails (as in Figure 6). These may not have been identical to those constructed on the second and third days of the battle but could have been improved on July 4 after Pickett's charge and prior to discovery of the escape of the Confederate Army. The ones used in battle may have been lower and lacked reveting.



Figure 4: Artillery lunettes on Cemetery Ridge, 1863, looking south.



Figure 5: Artillery lunettes on Cemetery Ridge, looking north.

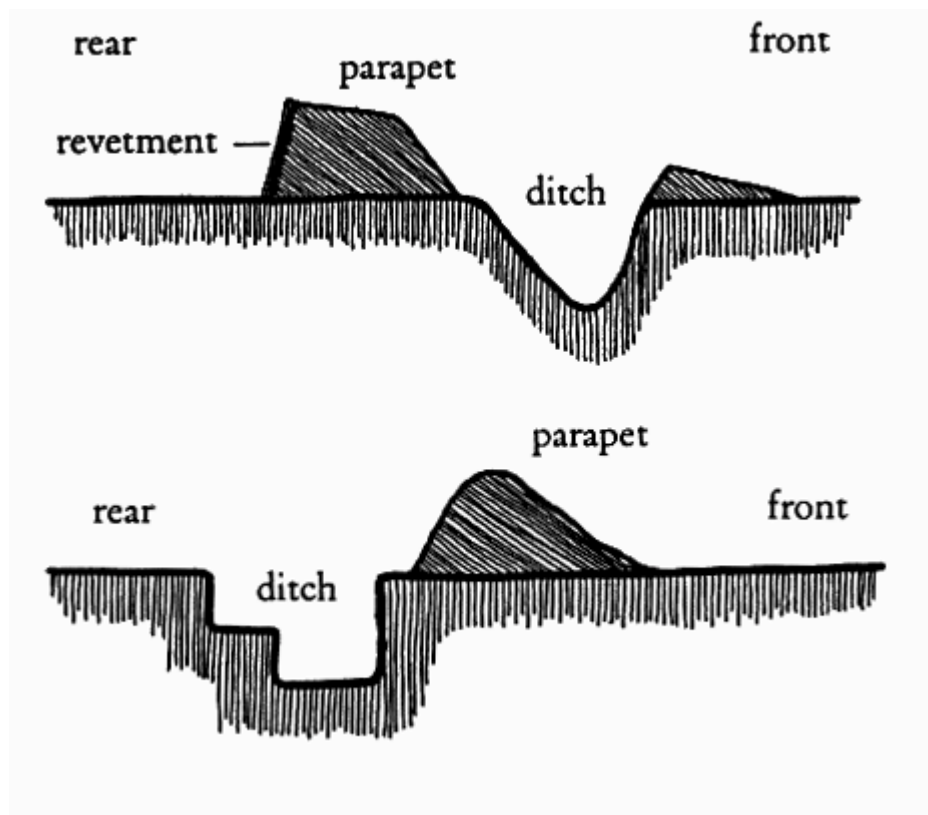


Figure 6: Methods of constructing field fortifications with foreditch (top) and backditch (bottom) (National Park Service and the Georgia Trust for Historic Preservation 1998: 100).

EXCAVATED FIELD EARTHWORKS IN NPS UNITS IN THE NORTHEAST

Three earthworks are known to have been systematically excavated in NPS units in the northeast: the Confederate Picket Line at Petersburg National Battlefield, the Confederate trench near Quarters 2 at Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park (FRSP) and the Confederate trenches in the Fawnlake Development at the Wilderness Unit of FRSP.

Confederate Picket Line: Excavation of a section of the Confederate Picket Line near the Crater at Petersburg National Battlefield by Brooke Blades in 1978 identified an intact section of earthwork complete with all anticipated subsurface features (Figure 7); a firing pit and drainage ditch extending to depth of three to four feet (Blades 1981). It contained numerous artifacts dating to the battle.

Monitoring of the installation of a water line by a ditch-witch to Quarters 2 at FRSP resulted in the profile through an infantry trench located on an approximately fifteen percent slope (Cooper 1989). Although sheet erosion had filled in portions of the trench from both its top and upslope margin, the subsoil evidenced disturbances in the anticipated foretrench and backtrench to indicate it was an intact feature (Figure 8). No artifacts were recovered to date the feature.

Excavation of two sections through the Confederate earthworks adjacent to Longstreet Drive in FRSP in 1989 by backhoe indicated that the earthworks had no sub-surface signature (Figure 9) (Louis Berger & Associates, Inc. 1989:10). These earthworks may have been constructed during the War Department's tenure of the park, prior to its acquisition by the NPS (Personal Communication with Noel Harrison, Park Historian), and may be considered interpretive devices.

Comparison of earthworks previously excavated within the NPS units indicated that intact features from the Civil War may be expected to exhibit subsurface features; a backtrench and possibly a foretrench and firing pit (see Figure 6). Later interpretive devices constructed may not exhibit these features and may be used to distinguish them from battle period resources.

Examination of contemporary field artillery manuals including John Gibbon's *The Artillerist's Manual*, D.H. Mahan's *A Complete Treatise on Field Fortification*, and Barry, Hunt, and French's *Instruction for Field Artillery*, did not reveal detailed instructions for constructing earthworks for field artillery. This study will assume that the location of McGilvery's Artillery has been accurately monumented and that the original earthworks were constructed as "lunettes" or more accurately a "redan," as a proper lunette contains two faces and two flanks while a redan consists of a simple angle or circular work as depicted in all examined examples of Civil War light field artillery earthworks. Both sides constructed similar artillery redans from the Peninsula Campaign through Gettysburg.

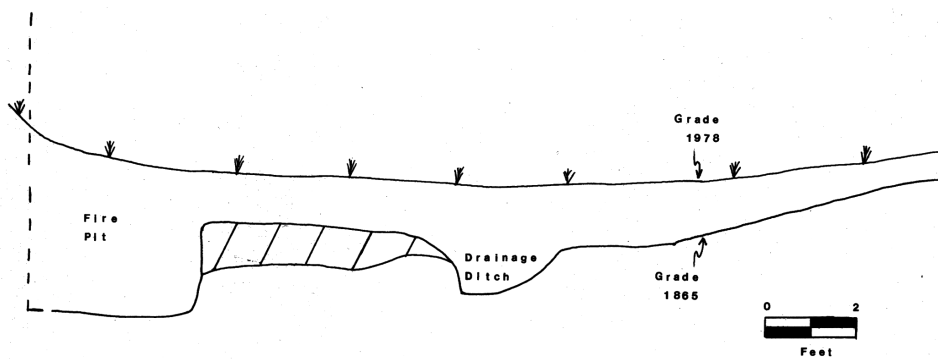


Figure 7: Section through Confederate Picket Line, Petersburg (Blades 1981).

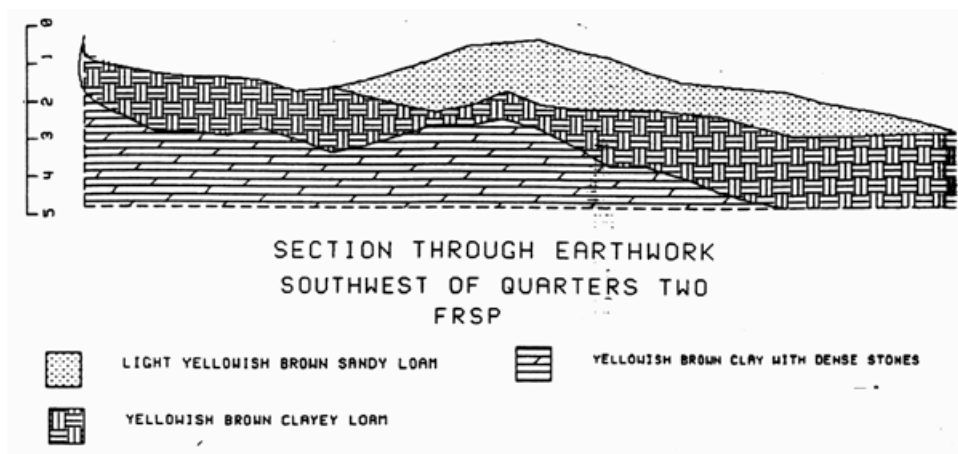


Figure 8: Section through Confederate earthwork at Fredericksburg (Cooper 1989).

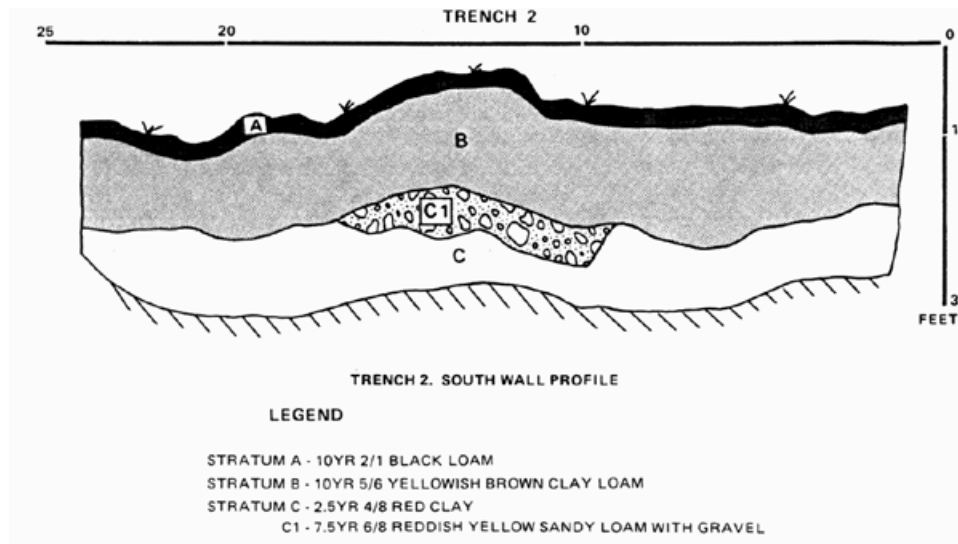


Figure 9: Earthwork at Faun Lake, Fredericksburg (Louis Berger & Associates 1989).

ENVIRONMENTAL SETTING

Gettysburg National Military Park is located in the The Gettysburg-Newark Lowland Section of the Piedmont province. It consists mainly of rolling low hills and valleys developed on red sedimentary rock. There are also isolated higher hills developed on diabase, baked sedimentary rock (hornfels), and conglomerates. Almost all of the underlying sedimentary rock dips to the north or northwest and many of the smaller drainageways are oriented normal to the direction of dip so that some topography has a northeast-southwest linearity. However, the basic drainage pattern is dendritic. Soils are usually red and often have a visually striking contrast to the green of vegetation. Relief is generally in the area of 100 to 200 feet, but locally is up to 600 feet on some of the isolated hills. The area of investigation lies around 560 feet amsl near the crest of a narrow ridge and shows evidence of erosion.

Soils in the area of investigation consist of Monalto silt loam, 3 to 8 percent slopes, moderately eroded (Speir 1967: 53). This series consists of deep, well-drained Red-Yellow Podzolic soils developed in material weathered from diabase, and occur on narrow ridges where diabase dikes penetrated the red shale. On narrow ridges they may be severely eroded. A typical profile of Monalto soils consists of:

Ap--0 to 7 inches; brown (7.5YR 4/4) silt loam; weak fine granular structure; friable, slightly sticky; many fine and medium roots; medium acid; abrupt smooth boundary. (5 to 10 inches thick)

BE--7 to 11 inches; dark red (2.5YR 3/6) silty clay loam; weak fine subangular blocky structure; friable, slightly sticky and slightly plastic many fine and medium roots; strongly acid; clear smooth boundary. (4 to 12 inches thick)

Bt1--11 to 27 inches; dark red (2.5YR 3/6) silty clay; moderate medium blocky and subangular blocky structure; firm, sticky and plastic; common fine and medium roots; thin distinct clay films; 5 percent by volume hard gravel of hypersthene and norite gabbro; strongly acid; clear smooth boundary.

Bt2--27 to 45 inches; dark red (2.5YR 3/6) clay; moderate medium subangular blocky structure; firm, sticky and plastic; few fine roots; continuous prominent clay films; few prominent black (10YR 2/1) clay films; 5 percent by volume cobbles of gabbro; medium acid; clear smooth boundary. (Combined thickness of the Bt is 31 to 44 inches)

C1--45 to 52 inches; red (2.5YR 4/6) silt loam; massive; friable, slightly sticky and slightly plastic; very few fine roots; 2 percent by volume stones; slightly acid; gradual smooth boundary. (6 to 36 inches thick)

C2--52 to 62 inches; yellowish red (5YR 4/6) loam; massive; very friable; 2 percent by volume stones; slightly acid.

The area selected for testing lies near the crest of one of the eroded ridges and has been traditionally used for agricultural purposes.

FIELD INVESTIGATIONS

Nine archeological test units were excavated immediately north of the Second Connecticut Artillery monument on Hancock Avenue (Figure 10). A section of the earthwork composed of a backtrench, mound, and foretrench was bisected with six units measuring four feet square (Units 1 through 6 east to west respectively). Three additional units were excavated to examine three potential features. Together, these units exposed a complete profile across the extent of the earthwork (Figure 11). An additional unit was placed south of the earthworks adjacent to the stone wall some 150 feet to the south to determine if additional resources associated with the support of these guns remained in that location.

All units were excavated by natural stratigraphy and all soils were passed through one-quarter inch hardware cloth to ensure uniform artifact recovery. Artifacts were placed in plastic bags labeled with full provenience information including unit and stratum designations, date of excavation, and names of excavators. All artifacts recovered during the excavations were retained and are presented in Appendix 1. The site datum was determined by establishing an artificial elevation of 100 feet for the southwest corner of the New York Auxiliary monument. Elevation and topographic information was collected using a transiting alidade and stadia.

Four strata were identified within the earthwork excavations that in each unit clearly demonstrated its origin (Figure 12). Stratum A consisted of the turf cover and root mat ranging in depth from 0.2 feet thick on the east slope, to almost 0.4 feet thick on its west slope. Stratum B consisted of a thick mass of mottled yellowish brown and dark yellowish brown clayey loam of varying thickness that conformed with the above-ground shape of the earthwork. Stratum C consisted of yellowish-brown silt loam plowzone averaging 0.9 feet thick. During excavation, in units where Stratum B as described above was absent during excavation this stratum was designated Stratum B. That stratum has been redesignated Stratum C for all units for post-excavation analysis. This was underlain by Stratum D, composed of the silty clay loam soil mixed with decaying fragments of the diabase formation which underlies the site.

Unit 1

Unit 1 was located in the presumed location of the backtrench some 4 feet west of Hancock Avenue, east of the eastern slope of the earthwork's "hump." It had four strata. Stratum A on its western margin lay between 96.3 to 96.1 feet and was composed of gray brown humic loam containing the root mat of the turf cover. It contained a single rim fragment of redware ceramic. Stratum B lay from 96.1 to 95.9 feet and was composed of yellowish brown silt loam. Stratum C was composed of dark yellowish brown clay loam which was excavated to the depth of 1.1 feet below surface, to the elevation of 95.2 feet. Stratum C contained a concentration of sandstone within a matrix of mottled yellow and brown soils and small gravel at the initial elevation of 96.0 feet which was designated Feature 1 (Table 1). It was irregular in shape and covered the northwest quarter of the unit. A second small area with similar fill was located in the northeast corner of the unit and was

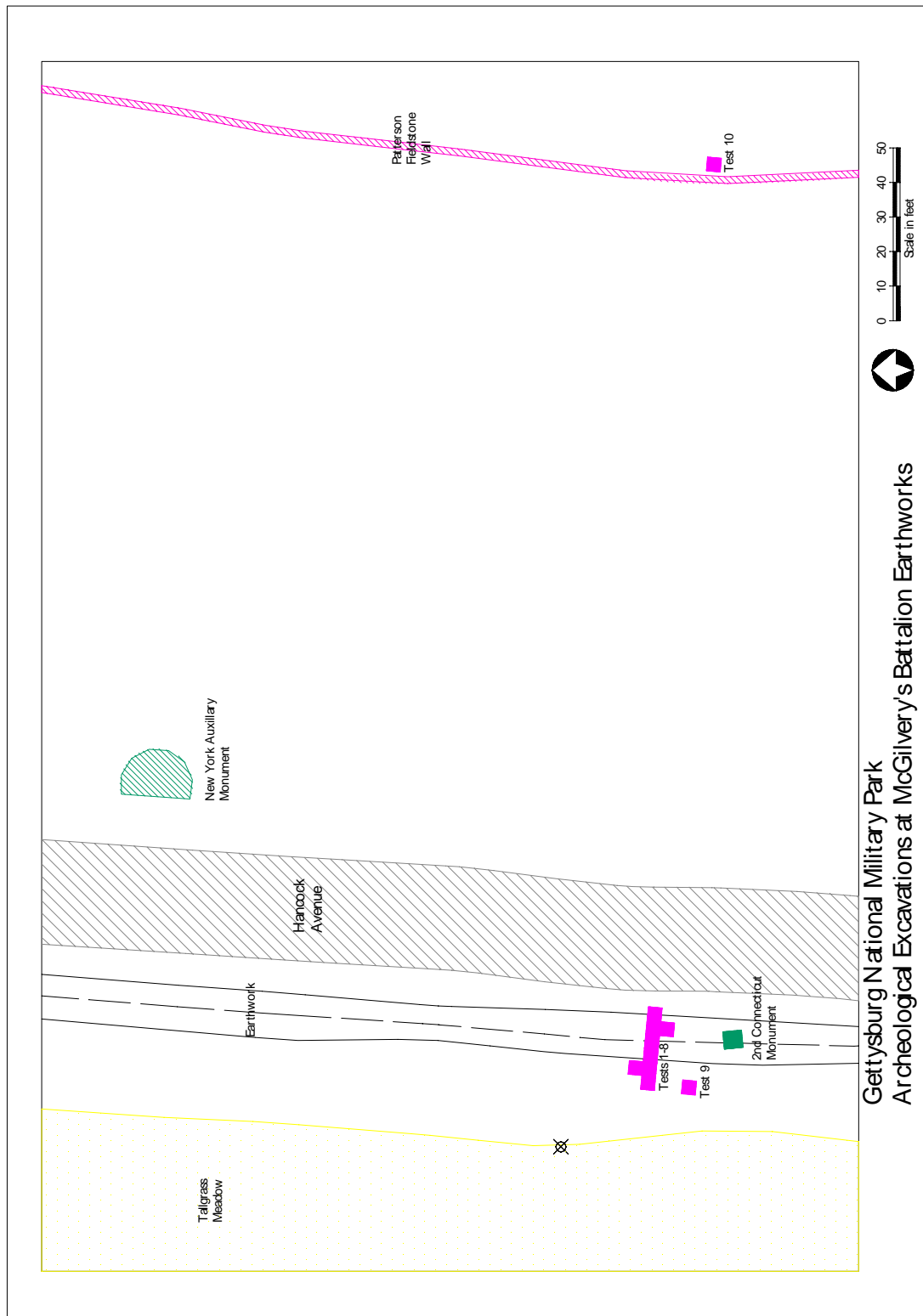


Figure 10: Location of archeological tests.

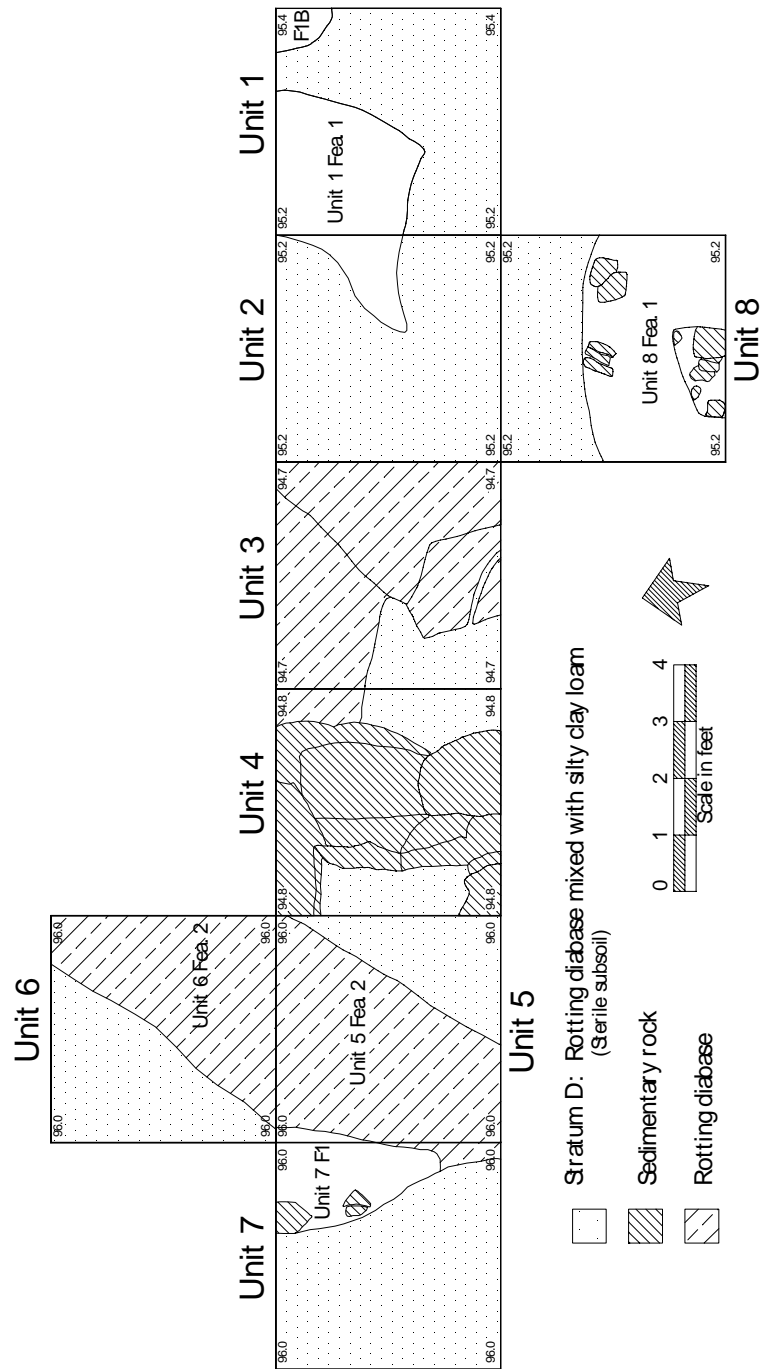


Figure 11: Plan view of excavations in earthwork.

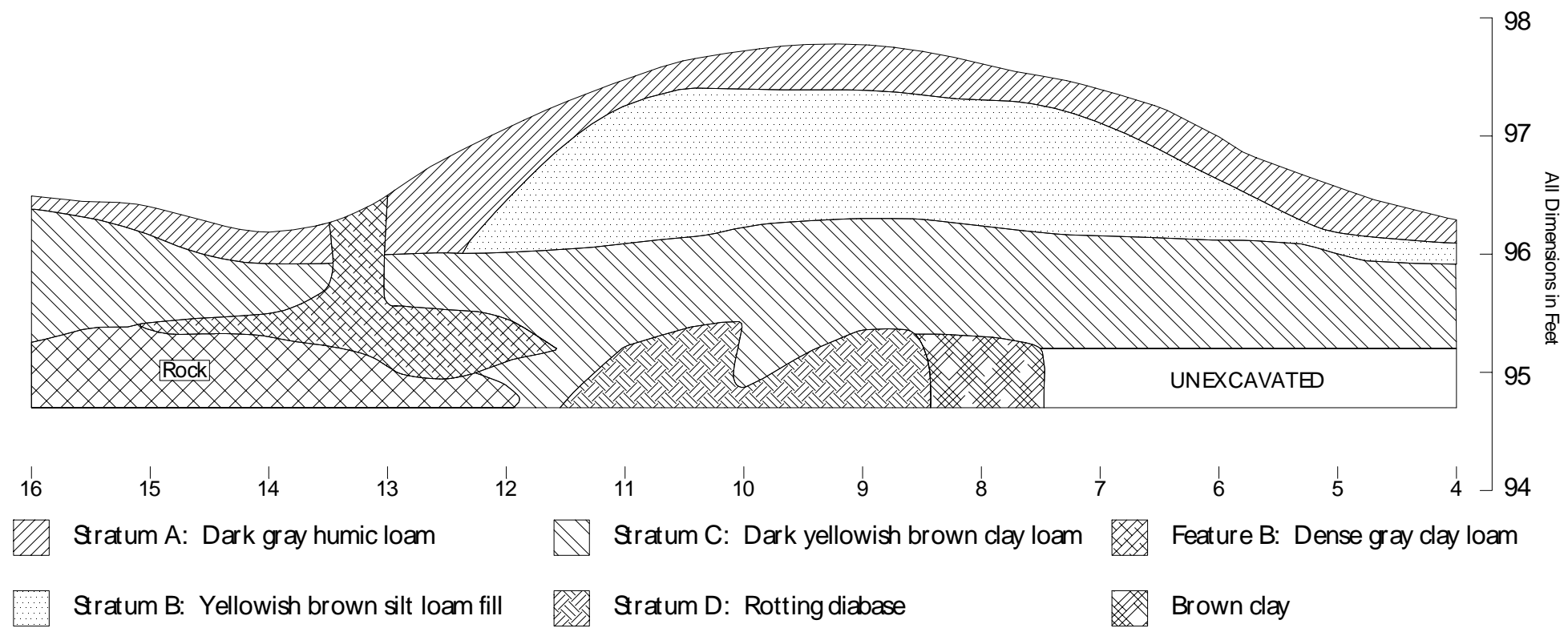
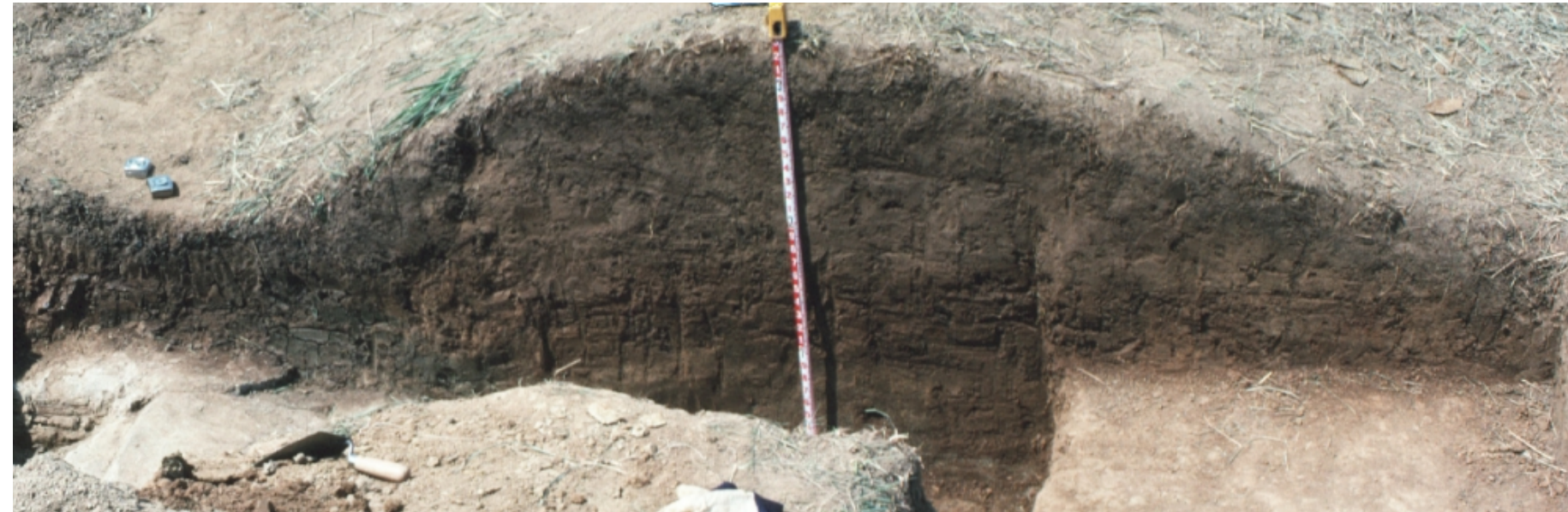


Figure 12: Photograph and measured drawing of north profile of archeological section through earthwork.

Table 1: Designated Features

Designation	Composition	Shape	Origin/Terminu s	Thickness	Interpretatio n
Unit 1 Feature 1	Stones with yellow brown clay loam and gravel	Irregular	Stratum D	Not excavated	Natural (Rotting stone)
Unit 1 Feature 1A	Same	Irregular	Stratum D	Not Excavated	Natural (Rotting stone)
Unit 4 Feature 1	Gray brown humic loam	Linear	Stratum A/ Stratum C	0.2 feet	Organic staining
Unit 5 Feature 2	Diabase fragments	Lens	Top Stratum D	0.1 feet	Natural (Rotting stone)
Unit 6 Feature 2	Diabase fragments	Lens	Top Stratum D	Not excavated	Natural (Rotting stone)
Unit 7 Feature 1	Gray clay loam	Lens	Top Stratum D	Not excavated	Plow scar
Unit 8 Feature 1	Mixed clay loam soils	Deep basin	Top Stratum D	1.4 feet	Possible trench

designated Feature 1B. Neither feature appeared to correspond with a backtrench typical of earthwork construction and were not investigated. They were most likely the remains of a rotting block of sandstone. Excavation was suspended at the top of Stratum D, defined as yellowish brown clay loam with moderate quantities of rotting diabase representing the sterile subsoil.

Unit 2

Unit 2 was located to the west of Unit 1 and was placed on the eastern slope of the earthwork's hump. Stratum A, lying at the western margin of the unit between 97.6 and 97.3 feet (or about 0.3 feet thick) was composed of the humic root mat of the turf cover. It contained two brick fragments, a fragment of clear vessel glass, a proximal end of a cut nail, a threaded nut $\frac{3}{4}$ inch diameter, and three fragments of a cement composite material. It closely followed the surface contour of the earthwork. Stratum B was composed of yellowish brown clay loam. Although its upper margin closely followed the surface contours of the earthwork, its lower margin lay was roughly flat, lying at the elevation of

96.2 feet on its western margin to 95.9 feet on its eastern margin. It contained two brick fragments, two body fragments of redware, and a 15/16 inch diameter nut containing the sheared portion of a bolt fused together. Stratum C began roughly flat across the unit at and was composed of dark yellowish brown clay loam from the elevation of 96.2 feet to 95.2 feet. Excavation was suspended at the top of Stratum D.

Unit 3

Unit 3 was placed in the central “hump” of the earthwork. Stratum A was composed of the humic root mat of the turf cover and followed the surface contours to an average depth of 0.4 feet. It contained no artifacts. Stratum B extended from 97.4 feet in the center of the unit sloping in either direction to the terminal depth of 96.0 feet where it appeared roughly flat. It contained five fragments of whiteware ceramic, one fragment of light green vessel glass, one proximal cut nail fragment, two threaded nuts of 15/16 inch diameter, one threaded nut of $\frac{3}{4}$ inch diameter, a carriage bolt distal fragment with a 5/8 inch diameter bolt fused to it, three fragments of metal strapping, three miscellaneous metal fragments, and one fragment of unidentified heat-altered material. All of the artifacts appear of recent manufacture and do not date from the time of the battle. Stratum C was composed of yellowish brown clay loam extending from 96.0 to 95.2 interrupted by extrusions of rotting diabase. These were interpreted as non-cultural. Stratum C contained a single threaded nut 15/16 in diameter to which the distal end of a threaded shaft was fused. Its manufacture post-dates the battle. Stratum D consisted of the rotten diabase. Stratum D was excavated to the elevation of 94.7 feet to ensure that battle-period earthworks were not present beneath the existing earthwork.

Unit 4

Unit 4 was located on the western slope of the earthwork. It contained two strata (A and C) and a portion of Stratum B in its eastern margin before terminating into solid sedimentary rock. Stratum A consisted of gray brown humic loam containing the root mat of the turf cover. Its lower margin closely followed the visible surface topography at the depth of 0.4 feet with increasing thickness at the eastern margin. It contained a single fragment of blue transfer-printed whiteware ceramic and a proximal cut nail fragment. Stratum B was composed of yellowish brown clay loam along its eastern margin. Stratum C was composed of yellowish brown clay loam. Its lower margin terminated into a layer of solid rock at the terminal elevation of 94.8 feet (Figure 13). Artifacts recovered from Stratum C were a single fragment of blue transfer-printed whiteware ceramic and a fragment of bright green vessel glass. A lens of dense gray clay loam in the eastern half of the unit extended from the surface to the surface of the rock, designated “Feature B”, and appeared to reflect natural processes. No evidence of a foretrench was discovered beneath the existing trench; however the proximity to the surface of solid stone formation would have precluded extensive excavation of a foretrench in this location.

Unit 5

Unit 5 was located west of Unit 4, outside of the surface-visible earthwork. It contained two strata before its excavation was suspended. Stratum A was composed of the grey brown humic silt loam rootmat of the turf covering and extended to the average elevation of 96.5 feet (or an average depth of 0.5 feet). It contained a fragment of alkaline-glazed sewer pipe, a fragment of blue transfer-printed whiteware ceramic, a complete cut nail, and a complete wire nail. Stratum B, representing the imported fill of the earthwork, was absent. Stratum C was composed of yellowish brown clay loam extending to the depth of 1.1 feet below surface (or lying around 96.0 feet) where it met an extrusion of the rotting diabase cutting across Stratum D in the unit from southwest to northeast. Stratum B contained no artifacts. The diabase formation was designated Feature 2 and excavation was suspended pending excavation of Unit 6, designed to intercept it.

Unit 6

Unit 6 was located to the north of Unit 5 to intercept Feature 2. It contained two strata and an extension of Feature 2 before excavation was suspended. Stratum A was composed of the grey brown humic silt loam rootmat of the turf covering extending to the depth of 0.4 feet below the surface. It contained no artifacts. Like Unit 5, Stratum B was absent. Stratum C was composed of yellowish brown loam extending to the depth of 1.1 feet below the surface where it met an extrusion of the rotting diabase extending across the unit from the southwest to the northeast which had been designated Feature 2 in Unit 5. No artifacts were recovered from this stratum. Upon inspection, Feature 2 was considered to be noncultural, representing an eroded section of the diabase formation that typically underlies these narrow ridges.

Unit 7

Unit 7 was excavated to the west of Unit 5 to intercept Feature 2. Like Unit 5 it had two strata. Stratum A was composed of the grey brown humic silt loam rootmat of the turf covering extending to the depth of 0.4 feet below the surface. It contained no artifacts. Like Unit 5, Stratum B was absent. Stratum C was composed of yellowish brown loam extending to the depth of 1.1 feet below the surface. A spherical iron shot 20.7 mm in diameter and a cut nail fragment were recovered from this stratum. Unit 5 Feature 2 did not extend westward beyond the eastern margin of Unit 7, terminating in an area of dark brown clay soil and sedimentary stones (Figure 14). Excavation was suspended at the top of Stratum D at a depth of 1.1 feet below surface or the elevation of 96.0 feet.

Unit 8

Unit 8 was located south of Unit 2 in the eastern slope of the existing earthwork. Like Unit 2, it contained the humic root mat designated Stratum A (containing three ceramic fragments) between 97.6 and 97.3 feet, and the mixed fill soils of the earthwork's "hump" designated stratum B between 97.3 and 96.1 feet. Stratum C, the plow zone, extended



Figure 13: Unit 4 looking south showing sedimentary rocks at base.



Figure 14: Units 7 (left) and 5 (right) looking north showing intersection of Unit 5 Feature 2 and Unit 7 Feature 1.



Figure 15: Photograph of Unit 8 south profile showing Unit 8 Feature 1.

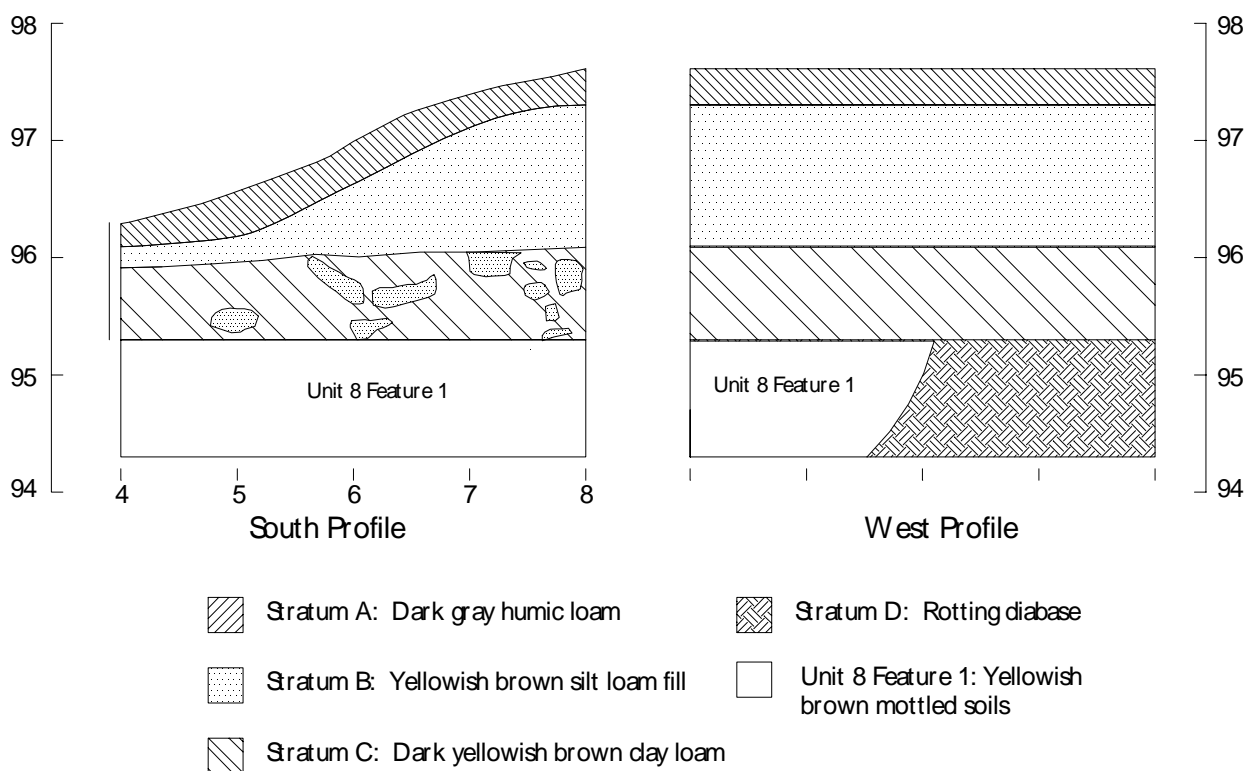


Figure 16: Unit 8 south and west profile drawings.

from 96.1 to 95.3 feet. Unit 8 Feature 1 was defined at the base of Stratum C at the interface with Stratum D as an area of yellowish brown mottled soils containing medium-sized (between 0.25' and 0.5' diameter) stones in the western two-thirds the unit. It was excavated to the depth of 1.0 feet or the elevation of 94.3 feet. This feature maintained its distinct curved border throughout excavation, and tapered toward the south (Figures 15 and 16). The bottom of Unit 8 Feature 1 appeared to merge into the underlying rotting diabase and was suspended (Figure 15).

Although no artifacts were recovered from Unit 8 Feature 1, its depth, limited extent, and curved northern margin suggest that it may be the remains of the northern corner of an artillery lunette. If so, then the existing earthworks both monument and seal the original archeological features from additional disturbance.

Unit 9

Unit 9 was located between 8 and 12 feet south of Unit 7 on the western side of the earthwork in an attempt to intersect Unit 5 Feature 2 to determine if the latter was a foretrench. Excavation of the unit revealed three strata. Stratum A was composed of the humic root mat from the surface to 0.4 fbs. Stratum C (B was absent) was composed of yellowish brown loam extending to the depth of 1.1 feet below the surface. It contained two fragments of whiteware ceramic. Stratum D was the underlying clay loam subsoil where excavation was suspended. Excavation of Unit 9 failed to identify the continuation of Unit 5 Feature 1, suggesting that the latter was not the eroded remains of a foretrench but rather a natural feature.

Unit 10

Unit 10 was excavated immediately behind the Patterson field stone wall. Measuring four feet square, it had three strata. Stratum A was composed of the humic root mat from the surface to 0.4 feet. Stratum C (B) was composed of yellowish brown loam extending from 0.4 to 1.0 feet below surface where it was replaced by Stratum D, the underlying clay subsoil. Stratum B contained an embossed eagle and shield "Shield" button, (Schuyler, Hartley, and Graham 1864:71) dating to the Civil War suggesting that the wall had indeed been present during the battle.

CONCLUSIONS

Archeological investigations at a portion of the McGilvery's Battery earthworks on Hancock Avenue did not identify any anticipated construction features of a linear earthwork. Excavation revealed that the earthwork did not possess a foretrench or backtrench, and that it appeared to be constructed of fill soils deposited directly on an existing plowzone. Artifacts recovered from Stratum B, the "hump" of the earthwork, did not contain any artifacts dating to the Civil War. A single spherical case shot, recovered from Unit 7 Stratum A was the single artifact possibly dating to 1863.

Unit 8 contained a deep feature originating at the base of the plowzone and containing mixed fill soils, extending to a depth of 1.0 feet. This feature might represent the terminal curve of an artillery lunette dating to the 1863 battle. Its appearance at the base of the plowzone is consistent with this ascription. However, no artifacts of any type were recovered from this deposit, and so it cannot be accurately dated. Conversely, it may also represent an intrusion into the subsoil of unknown function which could have significantly postdated the battle.

The remains of the original artillery lunettes that are likely present beneath the reconstructed earthwork would be eligible for listing as a contributing resource to the National Register eligibility of Gettysburg National Military Park under Criterion A and D for the battle. While the existing, above-ground linear earthwork does not date to the Battle of Gettysburg, and does not possess archeological features significant to that theme under Criterion D of the National Register, its association with the Memorial Period as a contributing structure to that theme is definitive.

The single unit excavated east of the Patterson Field Stone Wall produced a single Civil War era artifact (a button) within the plow zone. This find suggests that the wall may have been present during the battle, with some significant activity occurring directly behind it and may also be eligible under Criterion D of the National Register.

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APPENDIX 1: ARTIFACTS RECOVERED

CAT_NMBR	CP_WITHIN	OBJ_NAME	COU NT	DESCRIPTION	OBJ_DATE
GETT 162421	UNIT 1 STRATUM A	SHERD1	1	Earthenware, coarse. Redware.	AD 1630 TO 1940
GETT 162422	UNIT 2 STRATUM A	SHERD	1	Glass. Clear. Indefinite.	
GETT 162423	UNIT 2 STRATUM A	BRICK FRAGMENT	2	Brick fragment.	
GETT 162424	UNIT 2 STRATUM A	NAIL FRAGMENT	1	Nail, cut.	AD 1790 TO 1990
GETT 162425	UNIT 2 STRATUM A	NUT	1	Nut.	
GETT 162426	UNIT 2 STRATUM A	CEMENTED AGGREGATE	3	Cemented aggregate.	
GETT 162427	UNIT 2 STRATUM B	SHERD	2	Earthenware, coarse. Redware.	AD 1630 TO 1990
GETT 162428	UNIT 2 STRATUM B	BRICK FRAGMENT	3	Brick fragment.	
GETT 162429	UNIT 2 STRATUM B	NUT WITH SHAFT FRAGMENT	1	Nut with shaft fragment.	
GETT 162430	UNIT 3 STRATUM B	SHERD	5	Earthenware, refined. Whiteware.	AD 1810 TO 1990
GETT 162431	UNIT 3 STRATUM B	NUT WITH BOLT FRAGMENT	1	Nut with bolt fragment.	
GETT 162432	UNIT 3 STRATUM B	NAIL FRAGMENT	1	Nail, cut.	AD 1790 TO 1990
GETT 162433	UNIT 3 STRATUM B	NUT WITH BOLT FRAGMENT	2	Nut with bolt fragment.	
GETT 162434	UNIT 3 STRATUM B	STRAPPING FRAGMENT	3	Strapping fragment.	
GETT 162435	UNIT 3 STRATUM B	BYPRODUCT	1	Byproduct.	
GETT 162436	UNIT 3 STRATUM B	NUT	1	Nut.	
GETT 162437	UNIT 3 STRATUM B	SHERD	1	Glass. Light green. Indeterminate.	
GETT 162438	UNIT 3 STRATUM B	IRON LUMP	3	Iron lump.	
GETT 162439	UNIT 3 STRATUM B	NUT WITH BOLT FRAGMENT	1	Nut with bolt fragment.	
GETT 162440	UNIT 4 STRATUM A	SHERD	1	Earthenware, refined. Whiteware. Transfer printed.	AD 1810 TO 1990
GETT 162441	UNIT 4 STRATUM A	NAIL FRAGMENT	1	Nail, cut.	
GETT 162442	UNIT 4 STRATUM B	SHERD	1	Earthenware, refined. Whiteware. Hand painted.	AD 1810 TO 1990
GETT 162443	UNIT 4 STRATUM B	SHERD	1	Glass. Bright green. Indeterminate.	
GETT 162444	UNIT 5 STRATUM A	SHERD	1	Earthenware, refined. Whiteware. Transfer printed.	AD 1810 TO 1990
GETT 162446	UNIT 5 STRATUM A	NAIL	1	Nail, wire.	AD 1850 TO 1990
GETT 162447	UNIT 5 STRATUM A	PIPE FRAGMENT, SEWER	1	Sewer pipe.	

GETT 162448	UNIT 7 STRATUM B	SHOT	1 Shot, cannister.	
GETT 162449	UNIT 7 STRATUM B	NAIL FRAGMENT	1 Nail, cut.	AD 1790 TO 1990
GETT 162450	UNIT 8 STRATUM A	SHERD	1 Earthenware, refined. Whiteware.	AD 1810 TO 1990
GETT 162451	UNIT 8 STRATUM A	SHERD	1 Earthenware, coarse. Redware.	AD 1630 TO 1940
GETT 162452	UNIT 8 STRATUM A	SHERD FRAGMENT	1 Earthenware, refined. UID.	
GETT 162453	UNIT 9 STRATUM B	SHERD	1 Earthenware, refined. Whiteware.	AD 1810 TO 1990
GETT 162454	UNIT 9 STRATUM B	SHERD	1 Earthenware, refined. Whiteware.	AD 1810 TO 1990
GETT 162455	UNIT 10 STRATUM B	BUTTON	1 Button. South type 27.	AD 1837 TO 1865